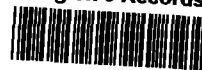


PEOPLES  
ENERGY

Peoples Gas  
North Shore Gas

EPA Region 5 Records Ctr.



227767

IL  
2/27/02

City DOE +  
DOE

February 27, 2002

VIA UPS

Mr. Fred Micke  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard, SE-5J  
Chicago, IL 60604

Re: Radiation Monitoring of Right-of-Way Excavations  
City of Chicago Permit No. 2010707

Dear Mr. Micke,

Enclosed you will find one copy of the radiation monitoring report prepared by STS Consultants, Ltd. consistent with the requirements of City of Chicago Department of Environment Form No. DOE.ROW.01. This report was submitted to the Chicago Department of Environment on February 4, 2002. If you have any questions, please contact me at (312) 240-4832.

Sincerely,

Alison E. Millerick  
Sr. Engineer  
Environmental Affairs  
Enclosures (1)



February 21, 2002

Ms. Amy Smith  
Health and Safety Department  
Peoples Energy Corp.  
130 East Randolph  
Chicago, Illinois 60601

RE: Radiation Monitoring of Right-of-Way Excavations  
**Permit No.: 201070707**  
Permit Address: 510 to 525 North St. Clair Street, Chicago, Illinois  
STS Project Number 1-24418-YA

Dear Ms. Smith:

In response to your request, STS Consultants, Ltd. (STS) recently completed radiation monitoring of excavations dug in St. Clair Street between Grand Avenue and Illinois Street by Peoples Energy personnel. This monitoring work was conducted on January 12, 2002. We understand the series of excavations were in response to a reported gas leak. Three excavations were made, one in the alley behind the 161 East Grand Building to bleed the gas line (noted as No. 1 on the attached field sketch), and two in the St. Clair right-of-way just south of the alley between Illinois Street and Grand Avenue to locate the gas main under the street (labeled Nos. 2 and 3 on the attached field sketch).

Field screening was conducted using a Ludlum 2221 rate-scaler and a 2 x 2 NaI detector. The detector can be operated in either a shielded or unshielded mode. In the shielded mode, the threshold for indicating an exceedance of the U.S. Environmental Protection Agency's (USEPA) cleanup threshold is 6,373 CPM. In the unshielded mode, the cleanup threshold is 19,797 CPM.

Excavation No. 1 (located in the alley behind 161 E. Grand Avenue) measured three feet square and two feet deep. Gamma radiation levels in this excavation measured 10,000 counts per minute (CPM) above the paver brick and 7,000 CPM once the pavers were removed. Both measurements were made in the shielded mode, indicating an exceedance of the cleanup level established by USEPA (6,373 CPM). As a result, the excavated spoil from this excavation was screened before removal from the site. All of the excavated spoil was below the threshold, with a maximum reading of 4,300 CPM. It is likely the elevated reading was partly due to "shine", naturally occurring radiation from the brick in the building and pavement. However, the readings above the cleanup threshold suggest care should be taken in any further excavations in this area.

Excavation Nos. 2 and 3 were in the right-of-way of St. Clair from the middle of the street toward the east curb. Each of these excavations measured approximately three feet by five feet and six feet deep. Gamma readings measured a maximum of 12,000 CPM in the unshielded mode. This is below gamma count indicating an exceedance of the cleanup level (19,797 CPM) and indicates no evidence of radiologically-impacted soil at the locations excavated.

No radiologically-impacted soil above the USEPA cleanup level of 7.1 picocuries per gram (pCi/g) total radium was removed from any of the excavations completed for this work. Field measurements suggest that material at or above the 7.1 pCi/g threshold may be present beneath the paving bricks in the alley behind 161 E. Grand Avenue. Any further excavations in this area should also be surveyed for elevated radiation.

The conclusions and opinions presented herein are based on the measurements taken at the locations surveyed. No warranty is either implied or expressed by the providing of this data. Conditions may differ at other locations, depths, or with time.

As part of your permit conditions, STS has forwarded this letter to:

Chicago Department of Environment  
Attention: Ms. Rahmat Begum  
30 North LaSalle Street, 25<sup>th</sup> Floor  
Chicago, Illinois 60602

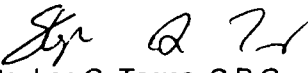
Additionally, in accordance with the Right-of-Way Agreement for the Lindsay Light sites, locations where exceedances of the cleanup criteria are documented are to be reported to USEPA, Region 5. We recommend a copy of this letter be forwarded to:

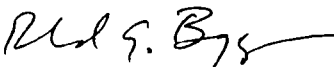
Mr. Fred Micke  
U. S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard, SE-5J  
Chicago, Illinois 60604

We have provided an additional copy for you to transmit to USEPA. We appreciate being of service to Peoples Energy. Please contact us with any questions you may have regarding this information.

Regards,

STS CONSULTANTS, LTD.

  
Stephen G. Torres, C.P.G.  
Science Group Manager

  
Richard G. Berggreen, C.P.G.  
Principal Geologist

Attachment: Field survey notes



STS Consultants Ltd.  
CALCULATION SHEET

PROJECT

People's Energy

SUBJECT

Excavation Location

STS JOB NO.

24418-YA

SHEET NO.

OF

ORIGINATED BY

DATE

01-12-02

CHECKED BY

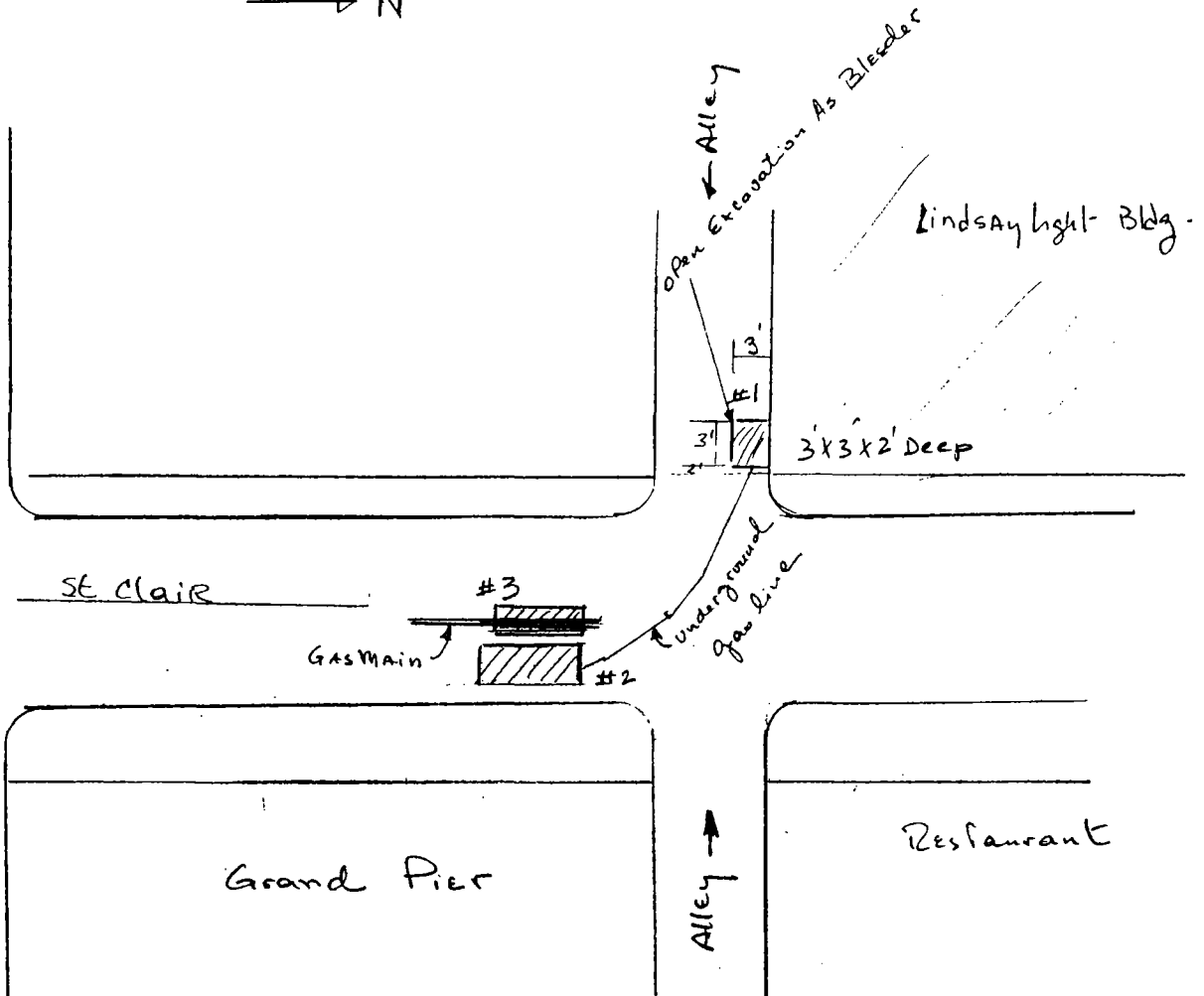
DATE

CALC. NO.

REV. NO.

ST Clair

→ N



6,373 CPM = 7.2 R/g shielded -

Action level = 19,797 CPM = 7.2 R/g unshielded

At Excavation #1 3'x3'x2' Deep -

Reading @ 10,000 CPM shielded Above the Pavers

Reading @ 7,000 CPM shielded Below the Pavers

check material in the trucks before Released as clean  
Reading @ 4,300 CPM shielded -

At Excavation #2 & 3 Reading @ 12,000 CPM unshielded -  
3'x5'x6' Deep.